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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,056	06/23/2004	Jari Sirvio	AWEK 2881	9131
7812	7590	06/22/2006	EXAMINER	
SMITH-HILL AND BEDELL, P.C. 16100 NW CORNELL ROAD, SUITE 220 BEAVERTON, OR 97006			SOTELO, JESUS D	
			ART UNIT	PAPER NUMBER
			3617	

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/500,056

Applicant(s)

SIRVIO ET AL.

Examiner

Jesús D. Sotelo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 8-18 are in the application. Claim 1-7 have been canceled.
2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/02/06 has been entered.

#### ***Claim Objections***

3. Claim 17 is objected to because of the following informalities: The spelling of "first" in line 5 should be corrected. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oshima (9-142391) in view of Heer et al (6,790,109).

Oshima discloses a ship including a main propulsion unit driving propeller 1 and teaches the use of steering propellers to provide the ship with steering in lieu of a conventional rudder. Oshima teaches that the use of a main propulsion unit provides the capability of generating a high output thrust, while the steering propellers reduce underwater noise. The steering propellers of Oshima include a propeller part that is stationarily located

outside the hull, as desired. Heer et al discloses a transport ship including a hull having a cargo deck at least in the aft region. Heer et al provides propulsion and steering through the use of steerable propellers 2 mounted on the aft area of the hull. In view of these disclosures, it would have been obvious to one skilled in the art to use the propulsion and steering system disclosed by Oshima on a cargo ship having an aft cargo space generally as taught by Heer et al. While Oshima discloses a particular application on a particular ship of his propulsion and steering arrangement, the disclosure is not limited to this application. As noted by Oshima, a main propulsion unit mounted in a conventional way, as in Oshima is capable of producing a higher propulsion output. The use of steerable units to propel a ship as in Heer et al involves the use of complex mounting means that permit the units to rotate for steering while providing sufficient support to transfer a forward propelling force to the ship. For these reasons the propulsion and steering arrangement as disclosed by Oshima would have been desirable on a cargo ship of the type disclosed by Heer et al. The number of main propulsion units is deemed to have been an obvious matter of design choice to one skilled in the art. The method steps of claim 16 are inclusive in the operation and steering means of Oshima as modified by Heer et al.

### ***Response to Arguments***

6. Applicant's arguments as presented in the declaration of Mr. Karl Hamberg, filed 5/02/06 have been fully considered but they are not persuasive.
7. Mr. Hamberg points out the differences in functions of the marine vessel of Oshima and that of Heer et al.

8. It is Mr. Hamberg's position that the vessels of Oshima and Heer et al are for different purposes and the type of powerplants used by either one are not interchangeable. Mr Hamberg points out that Oshima is silent as regards any problems related to better use of cargo space at the aft part of the vessel . While Oshima is concerned with noise emanating from the powerplants, the powerplant system disclosed in his patent is not limited to the application disclosed in his patent. The basic teaching of the reference to Oshima is to provide a marine vessel with a main propulsion drive and with auxiliary steering units mounted on the sides with respect to the main engine. The fact that Oshima does not show a cargo space in his vessel does not mean that the vessel is devoid of the same.

9. Mr. Hamberg states that "As regards combining the teachings of Heer et al and Oshima, due to excellent manoeuverability inherently provided by the steering propellers, there is no need to totally change the propulsion configuration of Heer et al". The question, however, is not whether the change is needed, but whether the change is obvious. The type of propulsion means disclosed by Heer et al require more maintenance than conventional propulsion means. The use of a main propulsion powerplant as taught by Oshima with smaller steering propellers would require less structural reinforcements to transfer the power of the propellers to the vessel, while in Heer et al because of the ability f the propellers to rotate, special arrangements would have to be made to transfer the power to the vessel. It should be noted that the claim only requires "a cargo deck, at least in the aft region of the water craft and above which the hull defines a cargo space". This does not require a major cargo hold.

10. Mr. Hamberg notes that in "his opinion, the only possible reason why a person of ordinary skill in the art would apply the propulsion and steering arrangement disclosed by

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Oshima to the ship of Heer et al would be if that person was reconstructing the invention claimed in the '056 application with benefit of hindsight.” In response to Mr. Hamberg’s argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971)

11. We believe that in combining Oshima and Heer et al, only the disclosures of the two references and knowledge which was within the level of one of ordinary skill in the art at the time the claimed invention was made was used.

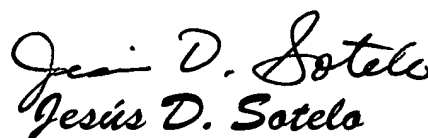
### **Conclusion**

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jesús D. Sotelo whose telephone number is 571-272-6686. The examiner can normally be reached on Mon. – Fri. 5:30 AM – 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Mr. Samuel J. Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jesús D. Sotelo  
Primary Examiner  
Art unit 3617  
KNX 03D69 ☺

jds  
June 20, 2006